

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: 233P137

Luminaire Tested: **EFIX-3A**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: 233P137
Test Lab: METALUX RESEARCH LABORATORIES
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: EFIX-3A
Description: 2GC8 SERIES LUMINAIRE WITH ACRYLIC LENS
Light Source: THREE- F28T8-SP-35-UMX-UCO- 2750 LUMENS EA. 28 WATTS EA.
Ballast/Driver: GE-332-MAX-L/ ULTRA

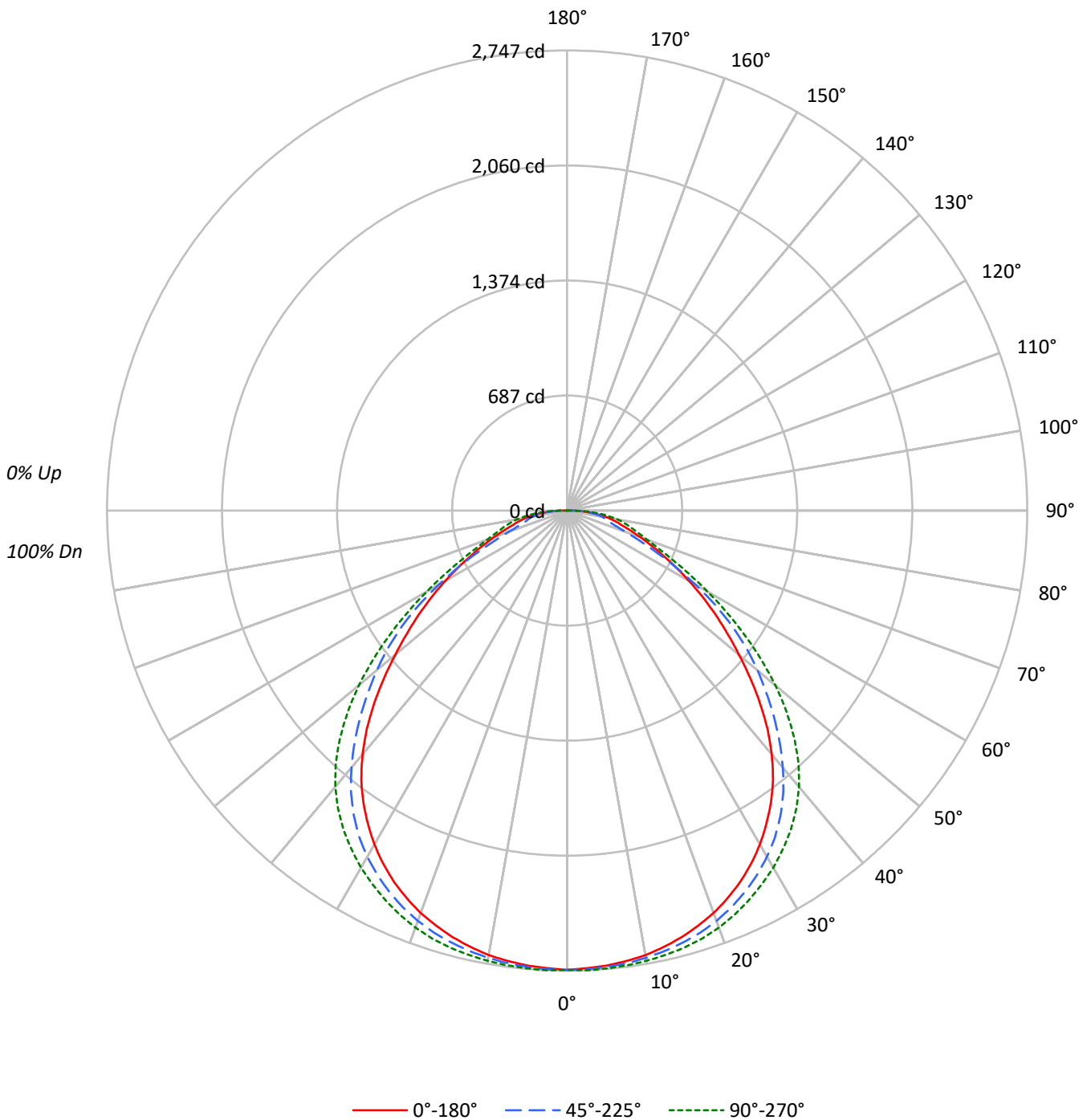
Summary

Lumens per Lamp: 2750 (3 lamps)
Luminaire Lumens: 7107.9 lumens
Efficiency: 86.2%
Efficacy: 109.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.33 / 1.36
Luminous Opening: Rectangular (W 1.79' x L: 3.81' x H: 0')
CIE Type: Direct

Input Watts (W): 65
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: 233P137
CATALOG NUMBER: EFIX-3A

Luminous Intensity Polar Plot





TEST NUMBER: 233P137
 CATALOG NUMBER: EFIX-3A

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	103	103	103	103	100	100	100	100	96	96	96	92	92	92	88	88	88	86				86
1	94	90	87	84	92	88	85	82	85	82	80	81	79	77	78	77	75	73				73
2	86	80	74	69	84	78	73	68	75	71	67	72	68	65	69	67	64	62				62
3	79	70	64	58	77	69	63	58	67	61	57	64	60	56	62	58	55	53				53
4	73	63	56	50	71	62	55	50	60	54	49	58	52	48	56	51	48	46				46
5	67	56	49	43	65	55	48	43	54	47	43	52	47	42	50	46	42	40				40
6	62	51	44	38	60	50	43	38	49	42	38	47	42	37	46	41	37	35				35
7	58	46	39	34	56	46	39	34	44	38	33	43	37	33	42	37	33	31				31
8	54	42	35	30	52	42	35	30	41	34	30	40	34	30	39	33	30	28				28
9	50	39	32	27	49	38	32	27	37	31	27	37	31	27	36	31	27	25				25
10	47	36	29	25	46	35	29	25	35	29	25	34	28	25	33	28	24	23				23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4321	4321	4321
5°	4312	4325	4339
10°	4312	4338	4367
15°	4302	4356	4406
20°	4286	4370	4442
25°	4253	4368	4462
30°	4187	4342	4478
35°	4084	4273	4476
40°	3908	4122	4429
45°	3630	3893	4270
50°	3283	3638	3979
55°	2964	3302	3552
60°	2647	2786	3051
65°	2353	2189	2584
70°	2138	1700	2336
75°	2058	1589	2417
80°	2269	1924	2768
85°	2567	2369	3309



TEST NUMBER: 233P137
 CATALOG NUMBER: EFIX-3A

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	260.2	3.7	3.2	0°	2742	2742	2742	2742	2742	
10°-20°	753.6	10.6	9.1	5°	2726	2727	2734	2740	2743	259
20°-30°	1155.4	16.3	14.0	15°	2637	2645	2670	2690	2701	744
30°-40°	1385.7	19.5	16.8	25°	2446	2465	2512	2551	2566	1126
40°-50°	1352.4	19.0	16.4	35°	2123	2148	2221	2293	2327	1323
50°-60°	1059.1	14.9	12.8	45°	1629	1662	1747	1850	1916	1253
60°-70°	630.9	8.9	7.6	55°	1079	1109	1202	1256	1293	967
70°-80°	348.9	4.9	4.2	65°	631	587	587	660	693	631
80°-90°	156.9	2.2	1.9	75°	338	314	261	356	397	365
90°-100°	4.7	0.1	0.1	85°	142	130	131	170	183	138
100°-110°	0.0	0.0	0.0	90°	23	29	31	43	43	18
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	2169.3	30.5	26.3	165°	0	0	0	0	0	0
0°-40°	3555.0	50.0	43.1	175°	0	0	0	0	0	0
0°-60°	5966.5	83.9	72.3	180°	0	0	0	0	0	0
0°-90°	7103.3	99.9	86.1							
90°-120°	4.7	0.1	0.1							
90°-150°	4.7	0.1	0.1							
90°-180°	5.0	0.1	0.1							
0°-180°	7107.9	100.0	86.2							



TEST NUMBER: 233P137
 CATALOG NUMBER: EFIX-3A

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2742	2742	2742	2742	2742
2.5°	2734	2733	2740	2743	2747
5°	2726	2727	2734	2740	2743
7.5°	2712	2714	2725	2733	2738
10°	2695	2696	2711	2723	2729
12.5°	2668	2673	2693	2708	2717
15°	2637	2645	2670	2690	2701
17.5°	2599	2609	2642	2667	2679
20°	2556	2569	2606	2636	2649
22.5°	2504	2521	2563	2597	2611
25°	2446	2465	2512	2551	2566
27.5°	2378	2401	2453	2497	2516
30°	2301	2327	2386	2437	2461
32.5°	2215	2244	2310	2370	2397
35°	2123	2148	2221	2293	2327
37.5°	2019	2042	2119	2203	2246
40°	1900	1926	2004	2100	2153
42.5°	1771	1797	1878	1981	2044
45°	1629	1662	1747	1850	1916
47.5°	1484	1523	1614	1710	1775
50°	1339	1386	1484	1567	1623
52.5°	1206	1248	1348	1417	1459
55°	1079	1109	1202	1256	1293
57.5°	957	968	1046	1091	1127
60°	840	829	884	933	968
62.5°	729	700	728	785	822
65°	631	587	587	660	693
67.5°	542	494	465	557	587
70°	464	421	369	477	507
72.5°	395	363	301	411	445
75°	338	314	261	356	397
77.5°	293	267	236	306	353
80°	250	220	212	262	305
82.5°	198	174	177	219	249
85°	142	130	131	170	183
87.5°	82	81	79	108	111
90°	23	29	31	43	43
92.5°	0	0	0	0	0
95°	0	0	0	0	0
97.5°	0	0	0	0	0
100°	0	0	0	0	0
102.5°	0	0	0	0	0
105°	0	0	0	0	0
107.5°	0	0	0	0	0
110°	0	0	0	0	0



TEST NUMBER: 233P137
CATALOG NUMBER: EFIX-3A

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0	0	0	0	0
115°	0	0	0	0	0
117.5°	0	0	0	0	0
120°	0	0	0	0	0
122.5°	0	0	0	0	0
125°	0	0	0	0	0
127.5°	0	0	0	0	0
130°	0	0	0	0	0
132.5°	0	0	0	0	0
135°	0	0	0	0	0
137.5°	0	0	0	0	0
140°	0	0	0	0	0
142.5°	0	0	0	0	0
145°	0	0	0	0	0
147.5°	0	0	0	0	0
150°	0	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)